
**STIMULATION DEVICE FOR SLEEP APNEA PREVENTION,
DETECTION AND TREATMENT**

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ABSTRACT

An implantable cardiac stimulation device comprises a metabolic demand sensor, an activity sensor, and one or more pulse generators.

10 The metabolic demand sensor and activity sensor can sense metabolic demand and physical activity parameters, respectively. The pulse generators can generate cardiac pacing pulses with timing based on a comparison of the metabolic demand and physical activity parameters. The timed cardiac pacing pulses can prevent a sleep apnea condition.

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